TISS C This Week



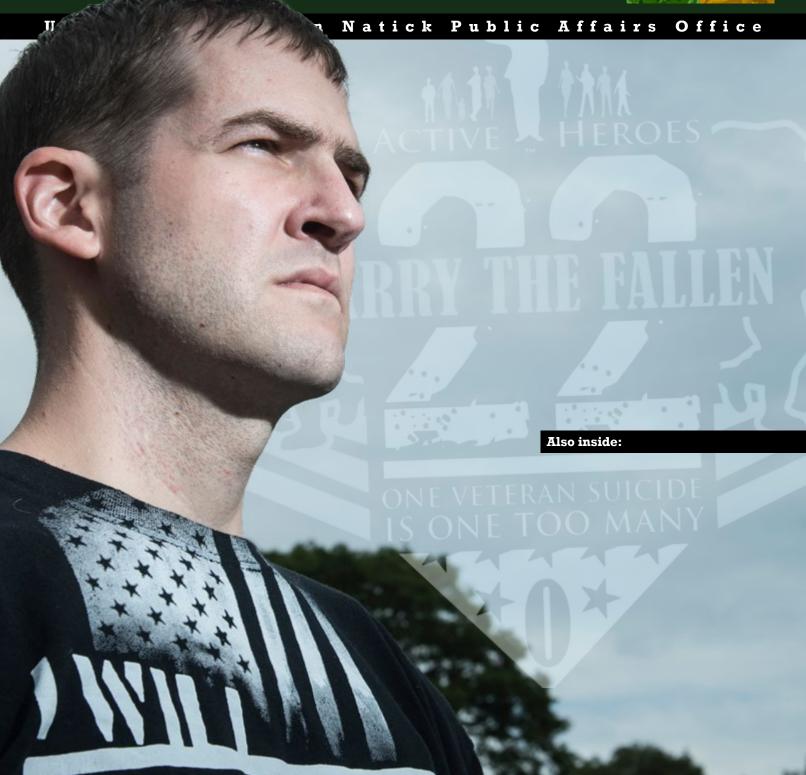




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September 3, 2014



Words Don't Suffice ...

Some words in our language get overused to the point that they lose their impact. Among those are "hero," "role model," "selfless," "courageous" and "inspiring."



Any of those words would fit comfortably in a sentence referring to Capt. Justin Fitch, however.

If you aren't already familiar with his story, an update appears on page 4. As he confronts his own mortality, Fitch summons all of his remaining energy to wage war against an insidious enemy – suicide – that claims the lives of 22 of his brothers- and sisters-in-arms each day. That's more than 8,000 veterans each year.

An average week lately for Fitch would be extraordinary for most people. He undergoes chemotherapy for stage 4 colon cancer on Mondays, Tuesdays and Wednesdays. On Thursdays and Fridays, he's at his office working as commander of the Headquarters Research Development Detachment at the Natick Soldier Research, Development and Engineering Center. His nights and weekends are usually consumed by efforts to raise money and awareness to help keep others alive.

And as he juggles all of this, Fitch copes with the pain, nausea, fatigue and insomnia that go with his condition.

The next time any of us are tempted to complain about how busy we are, or how bad a day we're having, perhaps we should pause and reflect on what Fitch might be experiencing at that very moment. It could return some sense of perspective to our own lives.

If you're new to NSSC or just haven't had the chance to meet him during his 2 ½ years here, do yourself a favor – stop by Building 15, introduce yourself, and shake Capt. Justin Fitch's hand. Who knows? You might even get to properly use one of those wonderful words in your conversation with him.

Sall Stw

Bob Reinert

USAG-Natick and NSSC Public Affairs



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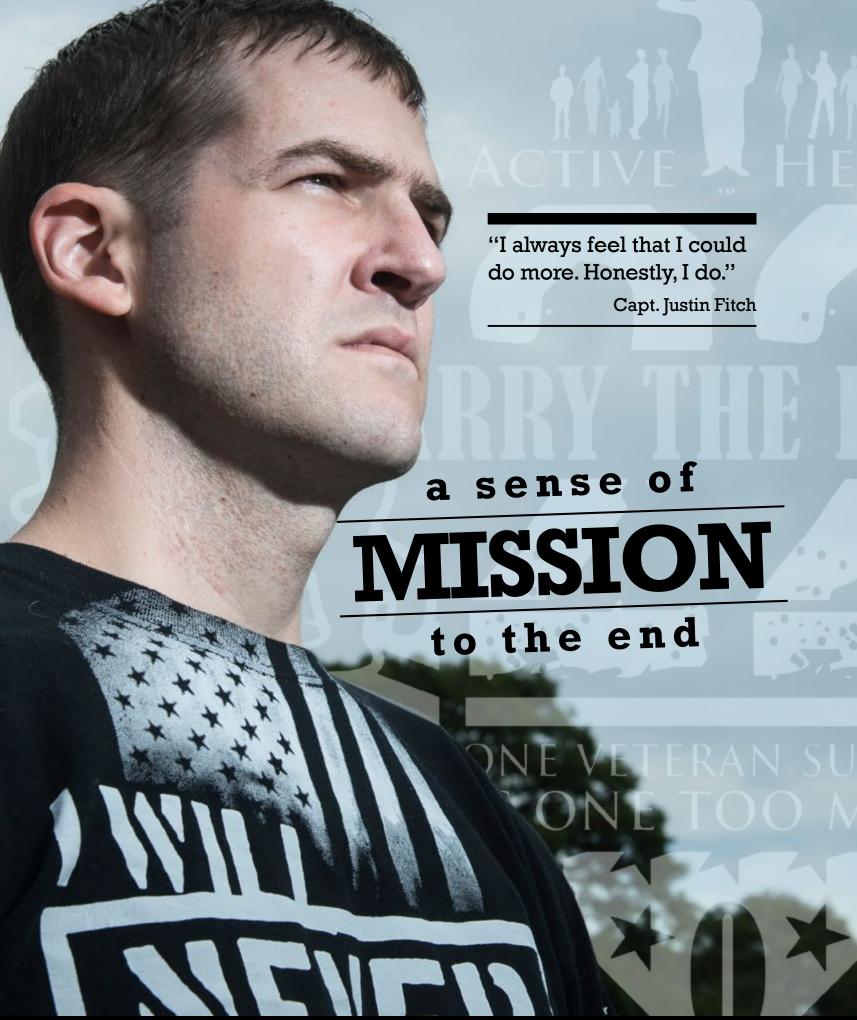
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to honor fallen general

By Brian Benson, MetroWest Daily News Staff

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If doctors said that you had a finite amount of time left, how would you spend your remaining days?

It's a question that Capt. Justin Fitch has already answered in no uncertain terms: He will continue to fight while devoting what energy he has to saving the lives of his brothers- and sisters-in-arms.

The 32-year-old commander of the Headquarters Research Development Detachment at the Natick Soldier Research, Development and Engineering Center has terminal colon cancer. He faces medical retirement from the Army, and doctors have told him that he has a matter of months to live.

Fitch has endured 40-plus chemotherapy treatments, six major surgeries and a number of smaller procedures. Daily painkillers help him to cope with the tumors that have wrapped themselves around his intestines.

Despite this immense personal challenge, Fitch thinks mostly about reducing the pain in others. He has spent the past year trying to increase awareness of and raise money for veterans with post-traumatic stress who are contemplating suicide. As Fitch regularly notes, 22 veterans a day take their own lives – in excess of 8,000 a year – more than all the U.S. service members who have been killed in action since 2001 in the Global War on Terrorism.

"Twenty-two is too many," said Fitch, an Operation Iraqi Freedom veteran. "We want to turn that number to zero."

As a result, Fitch has gone to battle against suicide. In November 2013, he began doing 12-hour team ruck marches with the "Carry the Fallen" campaign. Since then, he and his "Team Minuteman" have raised \$114,000 for the "Active Heroes" organization, which is developing a 144-acre retreat in Shepherdsville, Ky., for at-risk veterans and their families. Fitch has raised \$60,000 as an individual.

Those are the highest amounts in the organi-

zation, which has 109 teams nationally and has raised \$330,000.

When completed, the retreat will have such amenities as solar-powered cabins, campsites healing gardens, climbing walls, hiking and biking trails, archery ranges, petting zoos, equine therapy and a small artificial lake stocked with fish.

"We're looking at \$4 to \$5 million to finish (the retreat)," Fitch said. "Money is the thorn in our side that we're trying to overcome. It just takes one thing to raise awareness and to inspire people to do what's good. And people are good. They just don't know how to help sometimes."

Maybe they should just follow Fitch's lead. Recently, he reached into his own pocket to donate the symbolic amount of \$10,022 to the organization.

"If I wasn't trying to set up my wife for life, I would have put probably all the money in it,' said Fitch, adding that we wanted "to show people that I'm committed to the charity, that I believe in it, because people see me as a credible figure. If I trust that much of my money in the charity, then they should, too."

Fitch said he has leaned heavily on his wife, Samantha, to get through this. The pain medication keeps him from driving, so he must rely on her to take him to and from work. She cooks his meals and takes care of the medical appliances that come with his condition.

"She puts up with a lot of emotional stress because of it," Fitch said. "She's a solid cornerstone in my life. I firmly believe she's the strongest influence that I have in my life."

His three days of chemotherapy treatments each week leave him tired, nauseous, dehydrated and sleep-deprived. He also suffers from what he calls "chemo-brain" – increasing memory problems.

The other two days of the week, Fitch reports to his command at Natick, where he has served 2 ½ years.

"I do what I can in the short time that I have at work," Fitch said. "I try to keep my head above water. Realistically, between all the medical treatments that keep me out of the office, it has made it difficult.

"I always feel that I could do more. Honestly, I do. Despite what anyone says, there's still a war going on."

In what free time he has, Fitch works to keep other veterans alive. He understands their struggles, because there was a time in his own life when thoughts of suicide nearly consumed him.

"It's OK to seek help," Fitch said. "You can get help. Look at me. I'm a captain ... I sought help."

Team Minuteman of Carry the Fallen will hold its next ruck march Sept. 6 on the 26.2-mile Boston Marathon course from Hopkinton, Mass., to Boston's Boylston Street. Simultaneously, many of the other 109 teams across the nation will be doing ruck marches in their hometowns. Fitch will be on hand, but his illness will keep him mostly riding in the support vehicle.

"I do want to get out for a few miles to ruck with the team, preferably at the start and finish and maybe somewhere in between," Fitch said. "I don't see any possibility of me being able to finish the whole ruck with weight on my back."

There is one finish line that Fitch would like to reach – seeing the Active Heroes retreat completed. To do that, he would have to defy doctors' predictions. Smart money wouldn't bet against him.

"Other than family and friends, this is my final mission," said Fitch, "and I'm going to do everything I can to accomplish it."

Despite facing his own struggle against terminal colon cancer, Capt. Justin Fitch of the Natick Soldier Research, Development and Engineering Center has refused to stop working to reduce the number of suicides among veterans.

By Bob Reinert, USAG-Natick Public Affairs (for Soldiers Magazine) / NATICK, Mass. (Aug. 25, 2014)

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Sharing Knowledge

International scientists discuss **Soldier physical performance**

By Bob Reinert, USAG-Natick Public Affairs / NATICK, Mass. (Aug. 21, 2014)

In an era of downsizing and budget cuts, placing the right Soldiers in the right jobs, keeping them healthy and optimizing their physical performance have never been more important.

With that in mind, 325 scientists from around the world gathered in Boston this week for the 2014 3rd International Congress on Soldiers' Physical Performance, or ICSPP, to share ideas and increase efficiency in those

"The whole notion here is to get international scientists together to network and to have scientific exchange and dialogue, with a goal of really trying to have a better understanding of how to improve the health and performance of our Soldiers," Dr. Brad Nindl, ICSPP cochair, told participants in a media roundtable Aug. 19. "If you look at the program here, so many countries, so many militaries, are working on the same issues."

Nindl, science advisor at the <u>U.S. Army</u> <u>Institute of Public Health</u> for the U.S. Army Public Health Command and an Army Reserve lieutenant colonel, noted the fiscal constraints under which the U.S. military is now operating.

"So things are going to get leaner," Nindl said "To improve efficiency, I think we have to look to collaborating with our international neighbors. My goal would be that when people leave here that they have a network of fellow scientists who are working in similar areas."

Nindl's co-chair, Marilyn Sharp of the U.S. Army Research Institute of Environmental Medicine at Natick Soldier Systems Center, has been working to develop physical performance standards for Soldiers in an effort to predict who would be the best fit for a given job.

"Our goals right now are to try to come up with ways to place the best Soldier in the right job, and in that way, we will reduce injuries and optimize performance," Sharp said. "This is coming at a critical time. Everyone has to be able to do their job and do it well as we reduce the number of Soldiers that we have in our Army."

As the Army rolled out its Performance Triad, which focuses on improving Soldiers' activity, nutrition and sleep, the international gathering also looked at ways to keep warfighters

"There's so much scientific information known in terms of how to improve Soldiers' sleep, activity and nutrition that the challenge for all of us is to operationalize this for the Soldier on the ground, for the leader on the ground," Nindl said. "There are many things that we can do, many effective strategies that we can implement, if we continue to be in-

"The way that's going to be successful, I think, is by partnering with other nations, our international partners, and by breaking down stove pipes, breaking down communication barriers across different Army commands, different Army units, so that there's a unity of effort going forward."

Advances in Soldier equipment present ongoing challenges for these scientists.

"I think Soldier load has been a problem for decades," Sharp said. "And every time we lighten Soldiers' load, we add another piece of equipment to make it worse."

Sharp added that Soldier load has steadily increased since the Civil War, despite a recent 20-year effort to lighten it.

"The amount of load that you carry both in absolute terms and relative to your body weight is going to increase your injuries while you're deployed," Sharp said. "So I believe it's a very big problem that we need to continue

Dr. Nigel Taylor, an associate professor in the Centre for Human Physiology, School of Medicine, University of Wollongong, Australia, said that location of the load is also

to work to solve."

"For instance, placing one kilogram on the foot is eight times more metabolically inefficient than placing that one kilogram on the torso," Taylor said. "So it's not just the load that they're carrying; you've got to be smart about where it's located, as well."

Sharp noted that load can inhibit a Soldier's ability to move.

armor goes across the hip joint," Sharp said. "They can't do their job effectively. They're far less mobile than they need to be."

According to Nindl, training and advances in material science and textiles can help with Soldier load, which is more than just a matter of comfort.

"When you survey the medical evacuations from a combat theater over ten or twelve years — 35,000 medical evacuations, plus the major reason for those medical evacuations was not due to combat-related injury, but is due to musculoskeletal injury. And most of those injuries are from training and overuse," Nindl said. "I think a lot of those injuries would be related to load carriage, as well. Musculoskeletal injuries, particularly of the lower body, are a major problem, a major threat to our force, whether in garrison or whether in a combat theater."

return home with "a better understanding of what other countries are doing in a more detailed way. A better understanding of the science of Soldiers' physical performance will continue to be critical in ensuring each country's national security."

Taylor said it's not enough for scientists to sit and wait for the next paper or book to come out with new information on Soldier physical performance. He added that years can be wasted that way.

"Knowledge is not a static phenomenon," Taylor said. "It's continually growing. We need to be contributing to the growth, sharing our knowledge, and learning from others in all countries, because no one country has a monopoly on expertise."

Spc. Arielle Mailloux gets some help adjusting her prototype Generation III Improved Outer Tactical Vest from Capt. Lindsey Pawlowski, Aug. 21, 2012, at Fort Campbell, Ky. Both Soldiers are with the 1st Brigade Combat Team Female Engagement Team, 101st Airborne Division (Air Assault). These prototypes were designed specifically for the needs of female Soldiers, with shorter torso length and other improvements.



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A new Army Physical Fitness Uniform will become available service-wide, beginning in October next year.

Its design is based on Soldier feedback, said Col. Robert Mortlock, program manager, Soldier Protection and Individual Equipment, Fort Belvoir, Virginia.

There's a three-year phase-in program and the cost will be about \$3 less than the current IPFU, or Improved Physical Fitness Uniform, he said.

The Army Physical Fitness Uniform, or APFU, program was actually initiated because of Soldier feedback. A February 2012 Army Knowledge Online survey of some 76,000 Soldiers found that Soldiers had issues with the IPFU, he said. They liked its durability but believed the IPFU's textiles had not kept pace with commercially-available workout clothes. They also had concerns with other things, particularly modesty issues with the shorts, especially in events like sit-ups. Those concerns were expressed by males as well as females.

The issue was of such concern that Soldiers were purchasing spandex-like under garments to wear beneath the trunks, Mortlock said.

Another issue was that there were not enough female sizes in the IPFU, he said, meaning IPFUs that would fit all shapes and sizes.

PEO Soldier worked closely with the <u>Natick</u> <u>Soldier Research Development and Engineer-</u> trunks include a bigger key pocket and a convenient and secure ID card pouch.

In all, some 34 changes were made to the new APFU,

The APFU has five parts: the jacket and pants which resemble warm ups, trunks or shorts, and the short- and long-sleeve T-shirts, he said. The ensemble is modular; meaning parts of the APFU can be mixed and matched, for example, short- or long-sleeve T-shirts with the pants or trunks. During PT formations, the platoon sergeants will determine the appropriate combo.

PEO Soldier worked closely with the Natick Soldier Research, Development and Engineering Center to develop a new PT uniform that met Soldier concerns but did not cost more than the IPFU.

Soldier feedback not only determined the form, fit and function of the APFU, it also determined its look. The Army made prototypes of the APFU in a variety of colors and designs and taken to a series of Soldier town halls at Fort Hood, Texas, Fort Bragg, North Carolina, and Joint Base Lewis-McChord, Washington. Soldier feedback was solicited

providing feedback on form, fit, comfort and so on, Mortlock said. The APFU also was tested for things like durability, laundering, fiber strength, color fastness and color maintenance after laundering.

A key part of testing addressed the concern of some Soldiers that a black shirt may cause over-heating. Instrumented tests showed that the lighter weight material and superior moisture wicking fabric more than compensated for any increased heat from the dark material.

The response to the APFU was "overwhelmingly positive," he said, particularly with the trunks.

Not only that, Soldiers said they wear the APFU on weekends and off-duty outside the installations, Mortlock said, adding that many said they wouldn't wear the current IPFU off-duty. That means communities across the country will soon see Army pride as Soldiers do their workouts.

The APFU will come in two types, the Clothing Bag variant, and the Optional APFU, which will be visually the same as the APFU Issue variant, but uses some different materials. The individual items of the two variants can be mixed together. The Optional APFU variant will become available first when it arrives in Army military clothing sales stores sometime between October-December 2014.

The Clothing Bag issue variant will be issued to Soldiers from the clothing initial issue

Bodies in Motion

result of Soldier feedback

New Army PT uniforms

By David Vergun, Army News Service / WASHINGTON (Aug. 11, 2014)



ing Center to develop a new PT uniform that met Soldier concerns but did not cost more than the IPFU. The APFU met the goal of controlling costs and improving performance by adopting lighter high tech moisture wicking fabric. The APFU introduces multiple sizes, including female sizing, and has solved the modesty issue, Mortlock said.

The fabric of the trunks will continue to be made with durable nylon fabric, but it is lighter than and not as stiff as the IPFU trunks. Also, there will be a four-way stretch panel inside the trunks, sort of like bicycle pants, which eliminates the need for Soldiers to purchase their own under garments. The

about the design features as well as the preferred color scheme.

Then, the Army launched a second AKO survey, in which more than 190,000 responded, Mortlock said. Soldiers overwhelmingly favored a black T-shirt with gold lettering and a black jacket with gold chevron and the Army logo.

Then it was on to testing.

About 876 Soldiers at Fort Wainwright, Alaska, Join Base Lewis-McChord, Fort Bragg, Fort Sill, Oklahoma, Fort Hood and Fort Jackson, South Carolina, wore the APFU during PT for a three-month period points, starting between April to June 2015, and to Reserve, National Guard, and Senior ROTC from July-August 2015. The APFU will be phased in as the IPFUs are used up and worn out. The mandatory wear date will go into effect approximately October 2017, or about three years after the APFU is introduced.

In conclusion, Mortlock said the Army reached out to Soldiers at "multiple touch points to ensure we got this right. The message is we're listening to Soldiers. We're continuing to listen to Soldiers, and this is the Soldiers' selection and Army leaders went along with this."

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Staying Connected

Internships link Americans to their Army

By David Vergun, Army News Service / WASHINGTON (Aug. 20, 2014)

A Pew Research Center report published in 2011 notes that a smaller share of Americans currently serve in the armed forces than at any time since the peacetime era between World Wars I and II.

Just one-half of one percent of Americans served in uniform at any given time, from 2001 to 2011 — the longest period of sustained conflict in the country's history — the report says.

Meanwhile, as the military shrinks in size, the connections between military members and the broader civilian population "appear to be growing more distant," the report notes.

Some commands, though, are hosting interns from colleges and universities and the training is helping boost the Army's connections with the American people.

This is not the Army's four decade's-old <u>Civilian Career Intern Program</u>, which is a training program for entry- to mid-level management positions as Army civilians.

This type of internship involves colleges and vocational training institutions, which typically encourage students to participate in summer internships in the business community, non-profits and government agencies.

Those that do internships with Army commands get to work alongside Soldiers, receiving personal exposure to the military and first-hand experience.

CONSTRUCTIVE ENGAGEMENT

In July of this year, the Army Corps of Engineers invited four students who were studying engineering to Wiesbaden, Germany, to work with corps engineers.

"This is a professional environment," said Ariel Dowdy, who is majoring in mechanical engineering at Alabama A&M, of her experience. "Being here gives me a good idea of what to expect when I actually enter the career field. I am working on construction project sites, so it gives me a good idea of what my job will be like if I go into construction management, or project engineering. I like being out in the field and not sitting at a computer all day."

Another intern echoed her sentiments.

"I was pleasantly surprised by this internship because I have been able to get my hands on actual projects," said Ryan Deising. "I have done some design work. I worked directly with project managers to draw from scratch, or revise designs. I actually put my name on the drawings, so that is great experience for me."

INTERNING WITH ROBOTS

Last year, <u>U.S. Army Natick Soldier Systems</u> <u>Center</u>, in Massachusetts, participated in "another successful year of integrating high school students into an internship exchange program," according to leaders of that program.

Over the summer several Natick High School seniors substituted 80 hours of unpaid volunteer work at the Natick Soldier Research, Development and Engineering Center, for their last term of academic classes.

Their work included learning about and working on Natick business practices and development of an ice search-and-rescue robot.

"Every time someone reports a hole in the ice, the fire department has to go investigate," intern Adam Azanow said. "Towns don't have a lot of money to train scuba divers, and ice diving is very dangerous. The robots are used to search and locate if anything has gone through the ice without putting human lives

in danger. One robot drives across the ice and lowers the (remotely operated) vehicle."

The students have been working on the robots since May 2012. Azanow said that after his internship ends, he plans to return to school to help his classmates complete the project.

"I really like the concept behind hands-on experiences, and working in the real world, because you can only learn so much in the classroom," he added.

NON-AMERICANS INTERN, TOO

This year, some 60 South Korean university students are interning throughout U.S. Army Garrisons in South Korea.

"The Intern program is a win-win situation for both the Daegu City university students and the USAG (U.S. Army Garrison) Daegu installations," said Gladys Colon-Algarin, USAG Daegu volunteer corps program manager/intern program manager. "The program encourages an understanding of American culture with the future generation of Korean leaders. Many Korean university students who are interested in the American culture have the opportunity to travel, study and work in the U.S.

"However," she continued, "not all Korean university students have the financial means to do that. For those who cannot afford the cost of traveling overseas, the USAG Daegu Internship program allows them the opportunity to work in an American environment and learn skills related to their future careers."

USAG Daegu Commmander Col. Jim Bradford joined Korean university leaders and the Garrison Army Community Services representatives in a memorandum of understanding signing ceremony last November, which reaffirmed the importance the program has in strengthening and maintaining a strong relationship between the U.S. and South Korea.

PENTAGON INTERNING

Army News Service has been using summer interns now at the Pentagon for a number of years, with great success. Over this summer, Libby Howe and Lillian Boyd spent eight weeks reporting and taking pictures of Army events and senior leader activities.

Howe, an English major at Virginia Tech, said her time here was of great value and something she otherwise would never have experienced. Among the many events she covered for ARNEWS was the Army birthday and President Barack Obama awarding former Staff Sgt. Ryan Pitts the Medal of Honor.

Later, Howe remarked that it was incredible that ARNEWS entrusted her with such important responsibilities.

She noted that some of the other interns in organizations outside the Army were given routine or mundane assignments to complete, because their supervisors were uncomfortable entrusting college students with meaningful tasks.

As a result of her internship, Howe said she'd like to shift focus to journalism as a future career.

While an ARNEWS reporter did accompany the interns at most events to advise and assist, the interns did 100 percent of the reporting on their own, and very little, if any, editing or supervision was necessary.

Boyd, the other intern, also had a chance to cover Pitts during the Pentagon Hall of Heroes ceremony. She too had good things to say about the intern program.

Her opinion about the Army changed for the better as well.

"I was impressed by the Army's effort to promote social justice, including eliminating sexual harassment," she said, noting that she was especially surprised to discover that June is Gay Pride Month in the Defense Department.

Boyd interviewed Lt. Gen. Howard B. Bromberg, the G-1, about the Army's efforts to stamp out sexual assault. She thinks the Army's Sexual Harassment/Assault Response Above, Lillian Boyd, a college intern for the Army News Service, photographs Medal of Honor recipient and former Staff Sgt. Ryan Pitts, during a July 22, 2014, Pentagon Hall of Heroes ceremony.

Inset, U.S. Army Garrison Daegu, South Korea, Public Affairs intern Jeong Yean Lee prepares to cover a story with Cpl. Hyun Joon Chin.

and Prevention program, or one like it, could benefit universities.

Interns don't always come from a local colleges. Boyd, for instance, is a journalism major at Humboldt State in California.

Both ARNEWS interns said the experience changed their own lives for the better, and helped them formulate their own career plans. In turn, they shared their creative ideas and innovative ways of doing things.

While working this summer, both Boyd and Howe shared their everyday experiences with family and friends via social media, and that sharing with others will likely continue for years to come, they said.

These and other interns have had the rare and precious opportunity to serve alongside Soldiers and have become better acquainted with America's Army.

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Remembering Vietnam

Local veteran discusses war 50 years after it began

By Bob Reinert, USAG-Natick Public Affairs / NATICK, Mass. (Aug. 25, 2014)

Richard Norton arrived in Vietnam in 1968, not long after the infamous <u>Tet Offensive</u>. It didn't take him long to begin wondering what he was doing there. "I wasn't prepared for that war at all," Norton recalled. "I knew very little about it. You learn very quickly in combat, as many of you, I'm sure, have discovered already."

Norton was speaking Aug. 22 to an audience at Natick Soldier Systems Center, where he was taking part in a "Vietnam War Living History Discussion" some 50 years after America had entered the conflict when Congress passed the Gulf of Tonkin Resolution in the wake of a skirmish between North Vietnamese torpedo boats and an American destroyer.

"I hadn't really thought very much about the war," Norton said. "I probably had other interests in those days – maybe young women, cars. Who knows?"

So, after he was drafted at age 19 in 1966, he decided to enlist in the Army. Norton was chosen for Officer Candidate School and was commissioned as a 20 year old.

"I quickly figured out that second lieutenants didn't do KP," Norton said. "It seemed like a good deal to me."

Another part of the deal in those days was the Vietnam War, a divisive conflict taking place during a tumultuous time in American history. On the day that Norton left for Vietnam – March 31, 1968 – President Lyndon B. Johnson announced that he would not run for a second term. He also announced the beginning of the Paris Peace Talks.

"That, for me, was the most significant thing," Norton said.

It did not, however, save Norton from the Vietnam experience. In the first of his multiple tours, he served as a platoon leader with the 173rd Airborne Brigade in the Central Highlands.

"For many of us who were replacements in the war, this was an on-the-job training experience," Norton recalled. "Contrast that to today's Army, where I think the training is much more sophisticated, much more professional

"Sixty-eight was a very intense year of combat. I didn't have a sense that we were particularly winning the war."

According to Norton, the 173rd Bde. often went up against the 3rd Division of the North Vietnamese Army.

"It was an extremely sophisticated unit," Norton said. "We had some really hellish battles with them, and they were tough."

Norton said he never had trouble with his Soldiers in the field, despite what was happening at home.

"You wouldn't know that America was going through a gigantic revolution in terms of the Civil Rights Movement," Norton said. "But once we got to the rear, it changed. In that setting, the Soldiers would separate along racial lines, and the tensions were extreme." And those Soldiers returned home from that war to far less than a hero's welcome.

"I do think that there is a public regret for the poor greeting given Soldiers when they returned," Norton said. "So I think there is a desire not to sort of repeat that treatment. But, let's face it, after September 11th, everything changed."

Norton finished his 27-year Army career as a lieutenant colonel teaching at the <u>U.S. Military Academy</u>. The author or editor of a number of books, he is currently a professor at Boston University.

Now, when people discover that he fought in Vietnam, the reaction is much different than it was four decades ago. They usually thank him for his service.

"That's a change," Norton said. "That's a very significant change, and I'm very grateful for it."

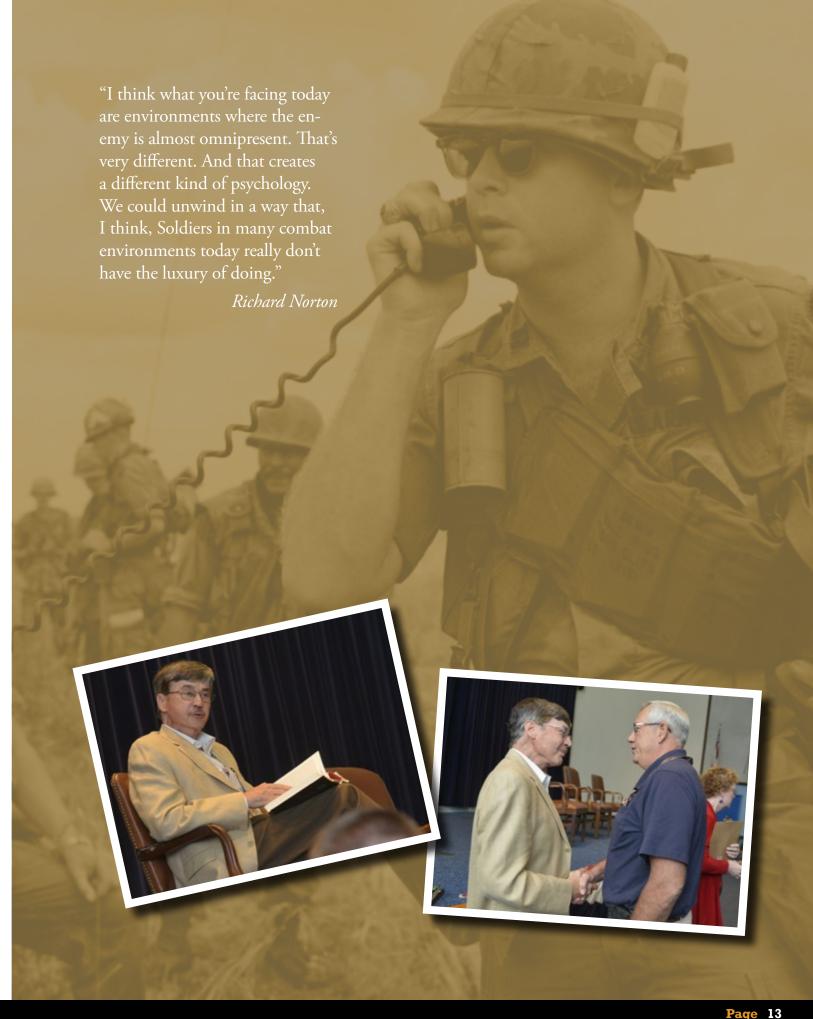
Another change, Norton said, is today's 360-degree battlefield.

"I think what you're facing today are environments where the enemy is almost omnipresent," Norton said. "That's very different. And that creates a different kind of psychology. We could unwind in a way that, I think, Soldiers in many combat environments today really don't have the luxury of doing."

When <u>Brig. Gen. William E. Cole</u>, NSSC senior commander, began his Army career in 1983, he was mentored by Vietnam veterans like Richard Norton.

"I learned so much from them," Cole said. "It was a great opportunity to absorb the lessons that they learned in combat and ... apply those to my early leadership training.

"The Vietnam veterans were like the gods. They were the guys who had been there and done that."



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Donna Leon was named the Army's winner of the NAACP 2014 Roy Wilkins Renown Service Award. Leon works for the Aerial Delivery and Soldier Protective Equipment Logistics Support Team at the Soldier Product Support Integration Directorate, TACOM Life Cycle Management Command at Natick Soldier Systems Center. Here, she confers with John Lemire.

A Life of Service

Natick employee named **Army's NAACP award winner**

By Bob Reinert, USAG-Natick Public Affairs / NATICK, Mass. (Aug. 5, 2014)

When Donna Leon was growing up in Oxford, N.C., her parents taught her to always be charitable with others, a lesson that their daughter never forgot.

"My parents are very giving in nature," Leon said. "We weren't independently wealthy or anything like that, but it was just the nature of both their families to share and have open doors for everybody."

No matter where she went during her 20-year career as a Soldier, Leon remembered to volunteer her time and talents to help others at work and in the community. After she retired in 2007, she continued that practice as an Army civilian employee at the Natick Soldier Systems Center.

"I feel like, honestly, my life is a life of service," Leon said. "This is something I can feel almost ... in my soul, as if this is who I am."

Leon's devotion to selfless service in her professional and personal life was recognized by the National Association for the Advancement of Colored People on July 22, when the NAACP made her the U.S. Army's recipient of the 2014 Roy Wilkins Renown Service Award at a ceremony in Las Vegas.

The award is given annually to American service members and Department of Defense civilian employees who have distinguished themselves by contributing to the DoD mission, overseas contingency operations, and demonstrated role model qualities and the core values of their respective military service or agency. Recipients promote the tenets of civil/human rights, equal opportunity, human relations, and/or public service. Leon was recognized for her support to equal opportunity policies and programs.

to receive the award was surprise, quickly followed by an almost overwhelming feeling of gratefulness," Leon said. "This award, to me, means that even the smallest efforts can make a difference in the lives of others, as well as your own."

Leon's efforts include collecting donations for the homeless, encouraging fellow workers and serving on various committees at Natick.

"I've always been an advocate for the disadvantaged, and I can remember even within my life not always being in the best position, needing some help myself," Leon said. "It's always meant a lot to me, what people have done for

"My initial reaction upon hearing that I was

"I've always been a volunteer. I've always tried to help. It's just a natural thing for me. I'd have to say I've done none of this on my own. There's been a lot of encouragement throughout the years."

Leon, who retired from the Army as a sergeant first class, serves as lead technical writer/editor and is a team leader for the Aerial Delivery and Soldier Protective Equipment Logistics Support Team at the Soldier Product Support Integration Directorate, TACOM Life Cycle Management Command at Natick.

their support in my volunteer efforts."

Obviously, Leon is at Natick for the Soldier.

"This is a job, of course, but it's a mission," Leon said. "The people who we support (are) the reason why we do this job. Your work does make a difference. I think it's very important that we all try to reach the highest skill levels possible."

Leon demonstrates that same sense of mission in her personal life.

mean a lot. When you have the time and if you have a talent, use it."

If her parents are any indication, Leon will continue serving others well into the future: Donnell and Leora Smith both continue to volunteer their time and help others at age 80

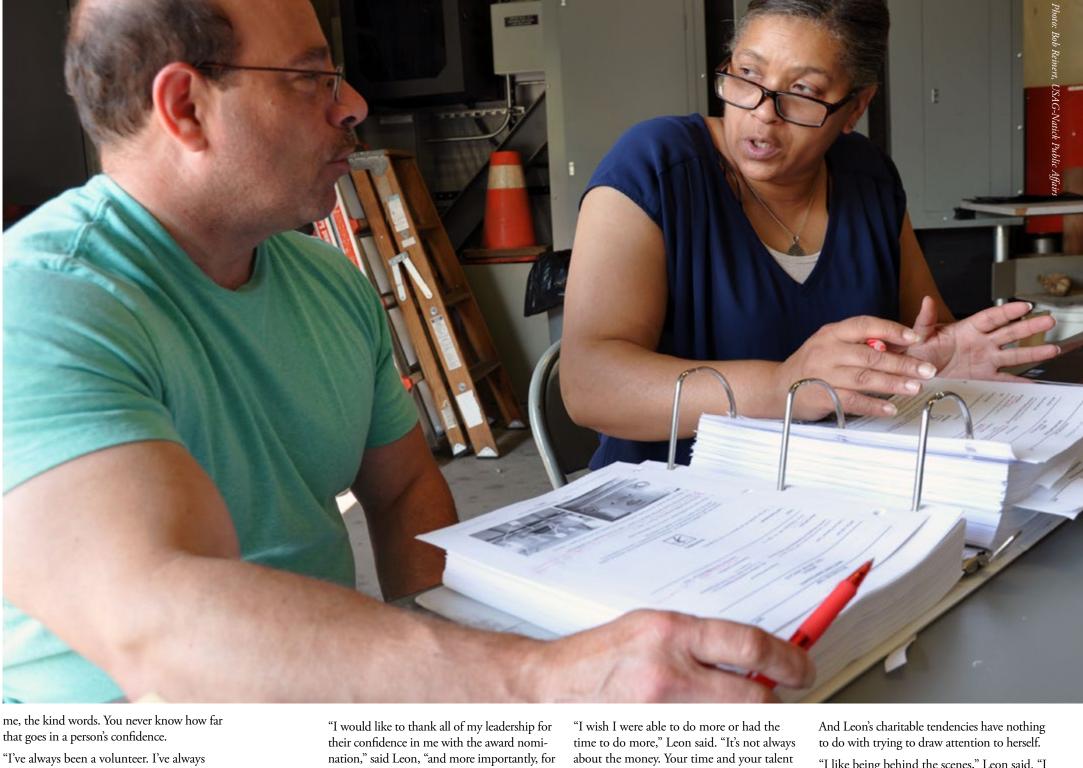
"They are very pleased, very happy," said Leon, "because they see me as just sort of carrying on."

"I like being behind the scenes," Leon said. "I don't like being in the limelight."

Leon plans to devote even more of her time, talents and energy to others when she reaches

"It would be very difficult for me to just sit there and do nothing," said Leon, "especially knowing that there are so many people who could use a hand.

"It's just a part of me, I guess. I think I am the happiest when I'm serving others."



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Natick evaluating advanced, energy-efficient shelters and shelter components

By Jane Benson, NSRDEC Public Affairs / NATICK, Mass. (Aug. 14, 2014)

The Natick Soldier Research, Development and Engineering Center, or NSRDEC, is demonstrating and evaluating new advanced, energy-efficient shelters and shelter components.

Researchers are using the demonstrations/ evaluations to develop new equipment and systems that will reduce fuel consumption.

"The ultimate goal is a 50-percent power reduction, which will equate to a large reduction in fuel. And then you'd hopefully only have to use 50 percent of the generators," said Clinton McAdams, a mechanical engineer in NSR-DEC's Expeditionary Basing & Collective Protection Directorate. "So instead of having to use six generators for a 150-man camp, we could theoretically cut it down to three."

McAdams said that they are using each demonstration to add to, and build upon, existing findings and will use the data to drive prototype system designs. The shelters and their components will eventually be used in the Army's Force Provider base camps, Air Force contingency base camps, and other applications.

"We're focusing on lighting, liners, environmental control units (air conditioners and fuel-fired heaters), solar shades, and thermal coatings," said McAdams. "We're also doing modeling and simulation work so that in the future we can plug in information on the external conditions before we send (the shelters) somewhere or before we go to environmental testing."

NSRDEC is performing the demonstration/ evaluation efforts with support from the Air Force; the U.S. Army Engineer Research and Development Center/Construction Engineering Research Laboratory, or ERDC/ CERL; Transformative Reductions in Operational Energy, or TROPEC; and the Cold Regions Test Center, or CRTC.

"NSRDEC is uniquely qualified to do this testing as we are the U.S. Army's shelter experts," McAdams said. "Along with that, we have extensive knowledge of doing shelter evaluations/demos in various locations, including hot-dry, cold, hot-humid, and (the Doriot) Climatic Chambers."

"NSRDEC provides the labor for setup and teardown, and we also do data collection," McAdams said. "The data we collect is from the internal temperatures, internal humidity, power draw on the (environmental control unit) or fuel used on a fuel-fired heater, and

Four shelters (in the foreground) and their components are currently being evaluated by the Natick Soldier Research, Development and Engineering Center, or NSRDEC, in Guam. The goal of the evaluation is to determine which components best increase energy efficiency.

ambient weather conditions along with other data points. NSRDEC also does the analysis of the data. The demos also allow us to get some idea of the durability of these systems in various conditions."

NSRDEC is currently evaluating four shelters in Guam, using two different liners and two different environmental control units, or ECUs. Two of the shelters are frame shelters with radiant barrier liners. One of the frame shelters is equipped with a five-ton ECU and one with a three-ton ECU.

"We are hoping to see what the power savings of the three-ton ECU is, if any, in a hot, humid environment," said McAdams.

The other two shelters in the Guam evaluation are airbeam shelters.

"Both shelters have rigid doors, rigid floors, and five-ton ECUs," McAdams said. "One shelter has a lofted liner and one has a radiant barrier liner. The plan is to compare the liners and see what liner performs best in this environment. We will also be looking to see how these items stand up to the high humidity of a tropical environment. All shelters are equipped with data logging, and we are taking temperature, humidity, power consumed by each ECU and other data points."

NSRDEC plans to keep the shelters up for a few months. The unit in Guam may possibly use the shelters for billeting, which would give NSRDEC the chance to collect operational data in addition to static data.

Following evaluations/demonstrations in Guam and also in Kuwait, some new shelters, including two prototype shelters and prototype liners, will be sent to the CTRC at Fort Greely, Alaska.

"Typically, the shelters need to accommodate extreme weather conditions ranging from minus 25 to 120 degrees (Fahrenheit). When we do the evaluation in Alaska we're going to see not only minus 25, but minus 30, minus 40," McAdams said. "When it's that cold, we are hoping to see that the tents will meet our requirements. We're hoping to see that we can maintain the internal environment and that the tent can withstand that temperature. There's a lot that goes into it. We want to give

Soldiers the heating, the cooling, the lights, and the convenience outlets so they can plug in whatever they need."

The goal is to not only reduce fuel and other forms of energy, but to also maintain a quality-of-life level found in the Army's Force Provider, a base camp also known for enabling rapid Soldier deployment and mobility.

"The Soldier's comfort is still a very high priority," said McAdams. "It's clear that there are some things (that) if the Soldiers don't have them, they don't perform as well. It would be very easy for us to just say 'Bundle up, you'll be fine.' But if we do that, Soldiers don't get as good a night's sleep. So anything we can do to help them, we try to do it."

"This work will improve warfighter quality of life by allowing the warfighter to focus on the mission rather ran refueling a generator," added McAdams. "This work will also give the warfighters a more comfortable environment to work in."

Shelter lighting options are also being investigated.

"We are looking at a flat string of LED lighting that we can leave in the tent," said McAdams. "The current fluorescent lights use a good amount of power, and they don't have the long life. The LED lights have such a long life that they should last the life of the shelter. They're durable enough that you can take the tent down and you can leave the lights in place. So, when you get to where you need to set them up next, you open up your tent and the lighting is already there."

In addition to reducing energy and maintaining quality of life, NSRDEC's work will also help reduce the logistical burden, enable more rapid mobility, and reduce maintenance costs. NSRDEC will be sharing what it discovers during the evaluations with the Air Force, the Navy and the Marine Corps.

"A lot of doors are opening up for a lot of collaboration," said McAdams. "People are starting to realize that Natick is a tent expert in the Army and on the RDEC side. There is a ton of knowledge here. Also, to be working in the research and development portion and to actually have your transition partner (Product Manager Force Sustainment Systems, or PM FSS) working right next to you and to be able to get their input helps prevent transition gaps. It gives you a bit of vision regarding possible future issues."



Natick weighs renaming street to honor fallen general

By Brian Benson, MetroWest Daily News Staff / NATICK, Mass (Aug. 27, 2014)

While leading Natick Soldier Systems Center, Maj. Gen. Harold Greene sought to make connections outside the installation, including with the town.

Now, town officials are looking to honor Greene, 55, who was killed in Afghanistan on Aug. 5.

Selectmen voted Monday to hold a public hearing on renaming Kansas Street, which leads to the U.S. Army base Greene once commanded, in honor of him.

Greene, who was senior commander at Natick Soldier Systems Center from 2009 to 2011, was the highest-ranking officer killed in combat since the Vietnam War.

Selectmen Chairman Josh Ostroff said the exact wording of the street proposal is still being developed.

"We are humbled and pleased that Natick is considering honoring Harry by naming a street after him," said his widow, Susan Myers, in a statement issued Tuesday night. "We are most grateful for the efforts to honor his legacy."

Greene "really helped establish a great partnership with the community," Ostroff said.

Under his leadership, Morse Institute Library's bookmobile began visiting the base, among other accomplishments, Ostroff said.

Ostroff has praised Greene's willingness to work with the town on economic development, public safety and public works matters.

John Harlow, a spokesman for Natick Soldier Systems Center, said Greene "was a great leader for our organization" who performed outreach with the town and elsewhere in the state.

Harlow said the base has named buildings after Massachusetts residents who received the <u>Medal of Honor</u>. Renaming the street is entirely the town's prerogative since it is a town street, he said.

Selectmen plan to hold a public hearing on the topic Nov. 3, which is close to Veterans Day.

Kansas Street is currently being reconstructed. If selectmen opt to rename the street, Ostroff said it would make sense to have it take effect when roadwork is finished next summer.

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Young Scholars

By Jane Benson, NSRDEC Public Affairs / NATICK, Mass. (July 29, 2014)

Natick visit inspires future scientists and engineers

High school students participating in Northeastern University's <u>Young Scholars Program</u> came to where science and engineering rule, the <u>Natick Soldier Research</u>, <u>Development and Engineering Center</u>, or NSRDEC, July 24, 2014.

"Hosting events such as the young scholars from Northeastern University is important because it not only opens our installation to future leaders and problem solvers, it creates important academic partnerships with the colleges and universities in our own backyard," said Joanna Graham, NSRDEC's Science, Technology, Engineering and Mathematics, or STEM, coordinator. "By opening our gates to students and educators, we get to share our technical story with current and future STEM professionals and continue to keep our pipeline full of the best and brightest scientists and engineers."

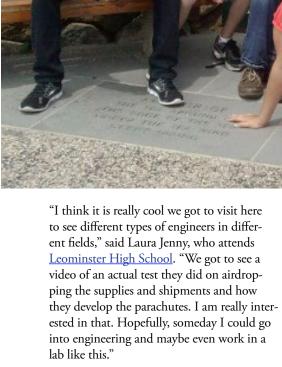
The highly selective Northeastern University Young Scholars Program provides high school students interested in STEM the opportunity to garner hands-on experiences. Field trips to corporate and government sites are one component of the program.

"We try to really expose the students to the range of ways they can utilize their STEM interests," said Claire Duggan, director for Programs and Operations, the Center for STEM Education at Northeastern University. "We want to show them that there are pathways in the public and private sector."

The visitors to NSRDEC — including about 30 high school juniors and seniors, three college mentors, and three educators — interacted with NSRDEC scientists and engineers and learned about the areas of biomechanics, aerial delivery, welding/fabrication, and combat feeding — to name a few. Students also toured the Doriot Climatic Chambers and the Ouellette Thermal Test Facility.

"It feels great to bring our work to the students' attention," said George Matook, an NSRDEC mechanical engineer. "I love seeing the faces of budding engineers light up when I show them what we do in aerial delivery S&T. We always need more engineers, and reaching out to the students before they make their educational and career choices is crucial."

Matook's overview of NSRDEC's work in aerial delivery especially inspired one young scholar.



One student was particularly impressed with the Flameless Ration Heater, developed by NSRDEC's Combat Feeding Directorate, or CFD.

"The heater is amazing," said Ali Elgabri, who attends the <u>Al-Noor Academy</u>. "The heater is magic. You guys really feed your Soldiers, which is awesome."

"I am so happy to have been a part of the NU Young Scholars' tour," said P.J. Bitopoulos, an equipment specialist in NSRDEC's "We try to really expose the students to the range of ways they can utilize their STEM interests. We want to show them that there are pathways in the public and private sector."

Claire Duggan, director for Programs and Operations, the Center for STEM Education at Northeastern University

CFD. "It's wonderful to see the next generation of students coming through to learn about our R&D capabilities. I hope they'll continue on into scientific fields in their future."

High school students participating in Northeastern University's Young Scholars Program visited the Natick Soldier Research, Development and Engineering Center, or NSRDEC, on July 24, 2014. The visit provided the students — who are interested in science, technology, engineering and mathematics, or STEM — the opportunity to garner handson experiences and learn about career possibilities.

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